LISTING OF THE CLAIMS

The following listing, if entered, replaces all prior versions of the claims in the present application.

1. (**Currently Amended**) A method comprising:

receiving a packet, the packet comprising a multicast destination address; and

sending a copy of the packet to a virtual network device sub-unit via a virtual network device link, wherein

the virtual network device link couples two virtual network device sub-units, ~~**and wherein**~~

the two virtual network device sub-units are configured to operate as a single virtual network device[[;]]**,**

the virtual network device is configured to forward the packet to other layers within a network, and

the sending comprises sending at most one copy of the packet **from one virtual network device sub-unit to another** via the virtual network device link.

2. (Cancelled)

3. (Previously Presented) The method of claim 1, further comprising:

receiving a second packet via the virtual network device link, the second packet comprising a second multicast destination address; and

replicating the second packet for each of a plurality of outgoing VLANs (Virtual Local Area Networks) associated with the second multicast destination address.

4. (Original) The method of claim 3, further comprising:

sending at least one copy of the second packet to each line card that includes an interface associated with one of the outgoing VLANs.

5. (Original) The method of claim 3, further comprising:
sending at least one copy of the second packet to each line card that includes an interface associated with an incoming VLAN, wherein
the second packet is being conveyed in the incoming VLAN.

6. (Original) The method of claim 3, further comprising:
sending at most one copy of the second packet to each line card that includes an interface associated with one of the outgoing VLANs.

7. (Original) The method of claim 3, further comprising:
not sending any copy of the second packet via an uplink interface coupled to a virtual network device bundle.

8. (Previously Presented) The method of claim 1, further comprising:
receiving a third packet via the virtual network device link, the third packet comprising a unicast destination address; and
performing an egress lookup for the third packet in response to the receiving the third packet.

9. (Original) The method of claim 8, wherein
a header associated with the third packet is also received via the virtual network device link,
the header comprises a destination identifier.

10. (Original) The method of claim 9, further comprising:
sending the third packet and the header to another line card if a non-primary entry corresponding to the unicast destination address is found during the egress lookup.

11. (Original) The method of claim 9, further comprising:
if a primary entry corresponding to the unicast destination address is found during the egress lookup:

sending the third packet from an interface identified by the primary entry.

12. (Original) The method of claim 11, further comprising:

sending a notification via the virtual network device link if the destination identifier comprised in the header does not match a destination identifier comprised in the primary entry, wherein

the notification identifies the unicast destination address as corresponding to the destination identifier comprised in the primary entry.

13. (Previously Presented) A method, comprising:

receiving a packet via a virtual network device link, the packet comprising a unicast destination address, wherein

the virtual network device link couples two virtual network device sub-units, and wherein the two virtual network device sub-units are configured to operate as a single virtual network device; and

performing an egress lookup for the packet in response to the receiving the packet, wherein

the performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table.

14. (Original) The method of claim 13, wherein

a header associated with the packet is also received via the virtual network device link,

the header comprises a destination identifier.

15. (Original) The method of claim 14, further comprising:

sending the packet and the header to another line card if a non-primary entry corresponding to the unicast destination address is found during the egress lookup.

16. (Original) The method of claim 14, further comprising:

if a primary entry corresponding to the unicast destination address is found during the egress lookup:

sending the packet from an interface identified by the primary entry.

17. (Original) The method of claim 16, further comprising:

sending a notification via the virtual network device link if the destination identifier comprised in the header does not match a destination identifier comprised in the primary entry, wherein

the notification identifies the unicast destination address as corresponding to the destination identifier comprised in the primary entry.

18. (Original) The method of claim 16, wherein

the packet is only sent from the interface if the interface is not comprised in an uplink interface bundle.

19. (Previously Presented) The method of claim 13, further comprising:

receiving a second packet, the second packet comprising a multicast destination address; and

sending at most one copy of the second packet to one of the two virtual network device sub-units via the virtual network device link.

20. (Original) The method of claim 19, further comprising:

receiving a third packet via the virtual network device link, the third packet comprising a second multicast destination address; and

replicating the third packet for each of a plurality of outgoing VLANs (Virtual Local Area Networks) associated with the second multicast destination address.

21. (Original) The method of claim 20, further comprising:

sending at least one copy of the third packet to each line card that includes an interface associated with one of the outgoing VLANs.

22. (Original) The method of claim 20, further comprising:
sending at least one copy of the third packet to each line card that includes an interface associated with an incoming VLAN, wherein
the third packet is being conveyed in the incoming VLAN.

23. (Original) The method of claim 20, further comprising:
sending at most one copy of the third packet to each line card that includes an interface associated with one of the outgoing VLANs.

24. (Previously Presented) A method comprising:
receiving a packet via a virtual network device link;
performing one of an ingress lookup and an egress lookup for the packet, wherein
the ingress lookup is performed for the packet if the packet includes a multicast destination address;
the egress lookup is performed for the packet if the packet includes a unicast destination address, wherein
the performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table; and
a primary lookup table entry can be allocated in response to an ingress lookup but not in response to an egress lookup.

25. (Original) The method of claim 24, wherein
the packet includes a multicast destination address, and
the method further comprises:
replicating the packet for each of a plurality of outgoing VLANs associated with the multicast destination address.

26. (Original) The method of claim 25, further comprising:
sending at least one copy of the packet to each line card that includes an interface associated with one of the outgoing VLANs.

27. (Original) The method of claim 25, further comprising:

sending at most one copy of the packet to each line card that includes an interface associated with one of the outgoing VLANs.

28. (Original) The method of claim 25, further comprising:

not sending any copy of the packet via the virtual network device link.

29. (Original) The method of claim 25, further comprising:

not sending any copy of the packet via an uplink interface comprised in a uplink interface bundle.

30. (Original) The method of claim 24, wherein

a header associated with the packet is also received via the virtual network device link,

the header comprises a destination identifier, and

the packet comprises the unicast destination address, and

the method further comprises:

sending the packet and the header to another line card if a non-primary entry corresponding to the unicast destination address is found during the egress lookup.

31. (Original) The method of claim 30, further comprising:

if a primary entry corresponding to the unicast destination address is found during the egress lookup:

sending the packet from an interface identified by the primary entry.

32. (Original) The method of claim 30, further comprising:

sending a notification via the virtual network device link if a destination identifier comprised in the header does not match a destination identifier comprised in the primary entry, wherein

the notification identifies the unicast destination address as corresponding to the destination identifier comprised in the primary entry.

33. (Original) The method of claim 30, wherein
the packet is only sent from the interface if the interface is not comprised in a uplink interface bundle.

34. (Previously Presented) A system comprising:
an interface to a virtual network device link, wherein
the interface is configured to receive a packet,
the virtual network device link couples two virtual network device sub-units, and
the two virtual network device sub-units are configured to operate as a single virtual network device; and
a distributed forwarding module coupled to the interface, wherein
the distributed forwarding module is configured to forward the packet,
the distributed forwarding module is configured to perform an ingress lookup for the packet if the packet includes a multicast destination address, and
the distributed forwarding module is configured to perform an egress lookup for the packet if the packet includes a unicast destination address.

35. (Cancelled)

36. (Original) The system of claim 34, wherein
the packet includes a multicast destination address, and
the distributed forwarding module is configured to replicate the packet for each of a plurality of outgoing VLANs associated with the multicast destination address.

37. (Previously Presented) The system of claim 34, further comprising:
one of more line cards, wherein

the distributed forwarding module is configured to send at least one copy of the packet to each of the one or more line cards that includes an interface associated with one of the outgoing VLANs.

38. (Previously Presented) The system of claim 34, further comprising:
one or more line cards, wherein
the distributed forwarding module is configured to send at most one copy of the packet to each line card that includes an interface associated with one of the outgoing VLANs.

39. (Previously Presented) The system of claim 34, further comprising:
a second interface configured to receive a second packet, wherein
the second packet comprises a second multicast address, and
the distributed forwarding module is configured to send at most one copy of the second packet via the virtual network device link.

40. (Original) The system of claim 34, wherein
a header associated with the packet is also received via the virtual network device link,
the header comprises a destination identifier, and
the packet comprises the unicast destination address, and
the distributed forwarding module is configured to send the packet and the header to another line card if a non-primary entry corresponding to the unicast destination address is found during the egress lookup.

41. (Original) The system of claim 40, further comprising:
a second interface, wherein
the distributed forwarding module is configured to send the packet from the second interface if a primary entry corresponding to the unicast destination address is found during the egress lookup and if the primary entry identifies the second interface.

42. (Original) The system of claim 40, wherein

the distributed forwarding module is configured to send a notification via the virtual network device link if a destination identifier comprised in the header does not match a destination identifier comprised in the primary entry, and

the notification identifies the unicast destination address as corresponding to the destination identifier comprised in the primary entry.

43. (**Currently Amended**) A system comprising:

means for receiving a packet, the packet comprising a multicast destination address; and

means for sending a copy of the packet to a virtual network device sub-unit via a virtual network device link, wherein

the virtual network device link couples two virtual network device sub-units, ~~**and wherein**~~

the two virtual network device sub-units are configured to operate as a single virtual network device,

the virtual network device is configured to forward the packet to other layers within a network, and

the means for sending comprises sending at most one copy of the packet **from one virtual network device sub-unit to another** via the virtual network device link.

44. (Cancelled)

45. (Previously Presented) The system of claim 43, further comprising:

means for receiving a second packet via the virtual network device link, the second packet comprising a second multicast destination address; and

means for replicating the second packet for each of a plurality of outgoing VLANs (Virtual Local Area Networks) associated with the second multicast destination address.

46. (Original) The system of claim 45, further comprising:
means for sending at least one copy of the second packet to each line card that includes an interface associated with one of the outgoing VLANs.

47. (Original) The system of claim 45, further comprising:
means for sending at least one copy of the second packet to each line card that includes an interface associated with an incoming VLAN, wherein the second packet is being conveyed in the incoming VLAN.

48. (Original) The system of claim 45, further comprising:
means for sending at most one copy of the second packet to each line card that includes an interface associated with one of the outgoing VLANs.

49. (Previously Presented) The system of claim 43, further comprising:
means for receiving a third packet via the virtual network device link, the third packet comprising a unicast destination address; and
means for performing an egress lookup for the third packet in response to the receiving the third packet.

50. (Previously Presented) A system comprising:
means for receiving a packet via a virtual network device link, the packet comprising a unicast destination address, wherein
the virtual network device link couples two virtual network device sub-units, and wherein the two virtual network device sub-units are configured to operate as a single virtual network device; and
means for performing an egress lookup for the packet, wherein
the means for performing the egress lookup comprises means for allocating a non-primary entry corresponding to a source address of the packet in the lookup table.

51. (Original) The system of claim 50, wherein

a header associated with the packet is also received via the virtual network device link,

the header comprises a destination identifier obtained by performing an ingress lookup for the packet.

52. (Original) The system of claim 51, further comprising:

means for sending the packet and the header to another line card if a non-primary entry corresponding to the unicast destination address is found during the egress lookup.

53. (Original) The system of claim 51, further comprising:

means for sending the packet from an interface identified by a primary entry, if the primary entry corresponding to the unicast destination address is found during the egress lookup.

54. (Original) The system of claim 53, further comprising:

means for sending a notification via the virtual network device link if the destination identifier comprised in the header does not match a destination identifier comprised in the primary entry, wherein

the notification identifies the unicast destination address as corresponding to the destination identifier comprised in the primary entry.

55. (Original) The system of claim 53, wherein

the packet is only sent from the interface if the interface is not comprised in an uplink interface bundle.

56. (Previously Presented) The system of claim 51, further comprising:

means for receiving a second packet, the second packet comprising a multicast destination address; and

means for sending at most one copy of the second packet to one of the two virtual network device sub-units via the virtual network device link.

57. (**Currently Amended**) A computer readable medium storing a program, the program comprising program instructions executable to:

detect reception of a packet, the packet comprising a multicast destination address; and

send a copy of the packet to a virtual network device sub-unit via a virtual network device link, wherein

the virtual network device link couples two virtual network device sub-units, ~~**and wherein**~~

the two virtual network device sub-units are configured to operate as a single virtual network device,

the virtual network device is configured to forward the packet to other layers within a network, and

sending comprises sending at most one copy of the packet **from one virtual network device sub-unit to another** via the virtual network device link.

58. (Cancelled)

59. (Previously Presented) The computer readable medium of claim 57, wherein the program instructions are further executable to:

detect reception of a second packet via the virtual network device link, the second packet comprising a second multicast destination address; and

replicate the second packet for each of a plurality of outgoing VLANs (Virtual Local Area Networks) associated with the second multicast destination address.

60. (Original) The computer readable medium of claim 59, wherein the program instructions are further executable to:

send at least one copy of the second packet to each line card that includes an interface associated with one of the outgoing VLANs.

61. (Original) The computer readable medium of claim 59, wherein the program instructions are further executable to:

send at least one copy of the second packet to each line card that includes an interface associated with an incoming VLAN, wherein the second packet is being conveyed in the incoming VLAN.

62. (Original) The computer readable medium of claim 59, wherein the program instructions are further executable to:

send at most one copy of the second packet to each line card that includes an interface associated with one of the outgoing VLANs.

63. **(Currently Amended)** The computer readable medium of claim **[[58]]**<u>**57**</u>, wherein the program instructions are further executable to:

detect reception of a third packet via the virtual network device link, the third packet comprising a unicast destination address; and

perform an egress lookup for the third packet in response to the receiving the third packet.

64. (Previously Presented) A computer readable medium storing a program, the program comprising program instructions executable to:

detect reception of a packet via a virtual network device link, the packet comprising a unicast destination address, wherein

the virtual network device link couples two virtual network device sub-units, and wherein the two virtual network device sub-units are configured to operate as a single virtual network device; and

perform an egress lookup for the packet, wherein

performing the egress lookup comprises allocating a non-primary entry corresponding to a source address of the packet in the lookup table.

65. (Original) The computer readable medium of claim 64, wherein

a header associated with the packet is also received via the virtual network device link,

the header comprises a destination identifier.

66. (Original) The computer readable medium of claim 65, wherein the program instructions are further executable to:

send the packet and the header to another line card if a non-primary entry corresponding to the unicast destination address is found during the egress lookup.

67. (Original) The computer readable medium of claim 65, wherein the program instructions are further executable to:

send the packet from an interface identified by a primary entry, if the primary entry corresponding to the unicast destination address is found during the egress lookup.

68. (Original) The computer readable medium of claim 67, wherein the program instructions are further executable to:

send a notification via the virtual network device link if the destination identifier comprised in the header does not match a destination identifier comprised in the primary entry, wherein

the notification identifies the unicast destination address as corresponding to the destination identifier comprised in the primary entry.

69. (Original) The computer readable medium of claim 67, wherein

the packet is only sent from the interface if the interface is not comprised in an uplink interface bundle.

70. (Original) The computer readable medium of claim 65, wherein the program instructions are further executable to:

detect reception of a second packet, the second packet comprising a multicast destination address; and

send at most one copy of the second packet to a virtual network device sub-unit via a virtual network device link, the virtual network device sub-unit comprised in a virtual network device.